

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (previously presented): A print generating device for hiddenly embedding first information in an image to acquire an information-attached image and generating a print on which said information-attached image is recorded, comprising:

embedding means for hiddenly embedding the first information in the image; and

information attaching means for attaching second information, which indicates that said first information is embedded in said image, to said print,

wherein said information attaching means is means to attach said second information to said print by a visual mark,

wherein the second information has a shape that facilitates detection of geometrical distortions caused by tilt of an optical axis of a photographing lens for taking the image.

2. (original): The print generating device as set forth in claim 1, wherein said information attaching means is means to attach said second information to said print by hiddenly embedding said second information in said image in a different embedding manner than the manner in which said first information is embedded.

3. (canceled).

4. (original): An information detecting device comprising:

input means for receiving photographed-image data obtained by photographing an arbitrary print, which includes said print generated by said print generating device as set forth in claim 2, with image pick-up means;

judgment means for judging whether or not second information, which indicates that first information is embedded in an image, is detected from said photographed-image data; and

processing means for performing a process for detection of said first information on only the photographed-image data from which said second information is detected.

5. (original): The information detecting device as set forth in claim 4, further comprising distortion correction means for correcting geometrical distortions contained in said photographed-image data when said processing means is means to perform detection of said first information as a process for detection of said first information;

wherein said judgment means and said processing means are means to perform said judgment and said detection on the photographed-image data corrected by said distortion correction means.

6. (previously presented): The information detecting device as set forth in claim 5, wherein said distortion correction means is a means for correcting at least one of geometrical distortions caused by a photographing lens provided in said image pick-up means and geometrical distortions caused by a tilt of an optical axis of said photographing lens relative to said print.

7. (original): The information detecting device as set forth in claim 4, wherein said processing means is a means for performing a process of transmitting said photographed-image data to a device that detects said first information, as a process for detection of said first information, and is a means for transmitting said photographed-image data to said device that detects said first information, only when said judgment means detects said second information from said photographed-image data.

8. (previously presented): An information detecting device comprising:
input means for receiving photographed-image data obtained by photographing an arbitrary print, which includes said print generated by said print generating device as set forth in claim 1, with image pick-up means, wherein the information attaching means is means to attach the second information to the print by a visual mark; and
processing means for performing a process for detection of said first information.

9. (original): The information detecting device as set forth in claim 8, further comprising distortion correction means for correcting geometrical distortions contained in said photographed-image data when said processing means is a means for performing detection of said first information as a process for detection of said first information;
wherein said processing means is a means for performing said process for detection on the photographed-image data corrected by said distortion correction means.

10. (previously presented): The information detecting device as set forth in claim 9, wherein said distortion correction means is a means for correcting at least one of geometrical

distortions caused by a photographing lens provided in said image pick-up means and geometrical distortions caused by a tilt of an optical axis of said photographing lens relative to said print.

11. (original): The information detecting device as set forth in claim 4, wherein said image pick-up means is a camera provided in a portable terminal.

12. (original): The information detecting device as set forth in claim 4, wherein said image pick-up means is equipped with display means for displaying said print to be photographed, tilt detection means for detecting a tilt of an optical axis of said image pick-up means relative to said print, and display control means for displaying information representing the tilt of said optical axis detected by said tilt detection means, on said display means.

13. (original): The information detecting device as set forth in claim 4, wherein said first information is location information representing a storage location of audio data correlated with said image, and which further comprises audio data acquisition means for acquiring said audio data, based on said location information.

14. (previously presented): A print generating method comprising the steps of:
embedding first information in an image hiddenly and acquiring an information-attached image;
generating a print on which said information-attached image is recorded; and

attaching second information, which indicates that said first information is embedded in said image, to said print,

wherein the second information has a shape that facilitates detection of geometrical distortions caused by tilt of an optical axis of photographing lens for taking the image.

15. (original): The print generating method as set forth in claim 14, wherein said second information is attached to said print by hiddenly embedding said second information in said image in a different embedding manner from the manner in which said first information is embedded.

16. (original): An information detecting method comprising the steps of:
receiving photographed-image data obtained by photographing an arbitrary print, which includes said print generated by the method as set forth in claim 15, with image pick-up means;
judging whether or not second information, which indicates that first information is embedded in an image, is detected from said photographed-image data; and
performing a process for detection of said first information on only the photographed-image data from which said second information is detected.

17. (previously presented): A computer readable medium storing a program for causing a computer to execute:

a procedure of embedding first information in an image hiddenly and acquiring an information-attached image;

a procedure of generating a print on which said information-attached image is recorded;
and
a procedure of attaching second information, which indicates that said first information is embedded in said image, to said print,
wherein said second information is a visual mark,
wherein the second information has a shape that facilitates detection of geometrical distortions caused by tilt of an optical axis of a photographing lens for taking the image.

18. (previously presented): The computer readable medium as set forth in claim 17, wherein said procedure of attaching said second information to said print is a procedure of attaching said second information to said print by hiddenly embedding said second information in said image in a different embedding manner from the manner in which said first information is embedded.

19. (previously presented): A computer readable medium storing a program for causing a computer to execute:

a procedure of receiving photographed-image data obtained by photographing an arbitrary print, which includes said print generated by the program as set forth in claim 18, with image pick-up means;

a procedure of judging whether or not second information, which indicates that first information is embedded in an image, is detected from said photographed-image data; and

a procedure of performing a process for detection of said first information on only the photographed-image data from which said second information is detected.

20. (previously presented): The print generating device according to claim 2, wherein the embedding manner of the second information is easier to process than the embedding manner in which the first information is embedded.

21. (previously presented): The print generating device according to claim 1, wherein the second information is low-frequency information.

22. (new): The print generating device according to claim 1, wherein the second information is attached visibly and fixedly to a discrete sub-part of the image.

23. (new): The print generating device according to claim 22, wherein the second information is a right polygon.

24. (new): The print generating device according to claim 1, wherein the second information is a right polygon.

25. (new): The print generating device according to claim 1, wherein the photographing lens takes a snapshot of the printed image.